CALFED Hg Control Program

Hg in Water and Fish of the Delta Causes Hg to Be a CALFED "Constituent of Concern"

CALFED *"Fix-the-Delta"* Funds Potentially Available to Control Some Hg Inputs to Cache Creek

Doubt That Sufficient CALFED and Other Funds Available to Control All Hg Sources to the Delta to Cause the Tributaries and the Delta to Not Experience Violations of the Water Quality Standards of:

12 ng/L, 50 ng/L, or 5 ng/L

Issues That Need to Be Addressed in Formulating CALFED Hg Control Program

- Role of the Cache Creek High-Flow Hg in Causing Excessive Hg Bioaccumulation in Delta and Bay Fish

  Will the Control of Cache Creek Hg Inputs Result in a Decrease in Hg Residues in Delta and/or Bay Fish?

  There Could Already Be Sufficient Hg in Delta and Bay Sediments so That Reducing Cache Creek High-Flow Hg Would Have Little or No Impact on the Excessive Hg Bioaccumulation in Fish

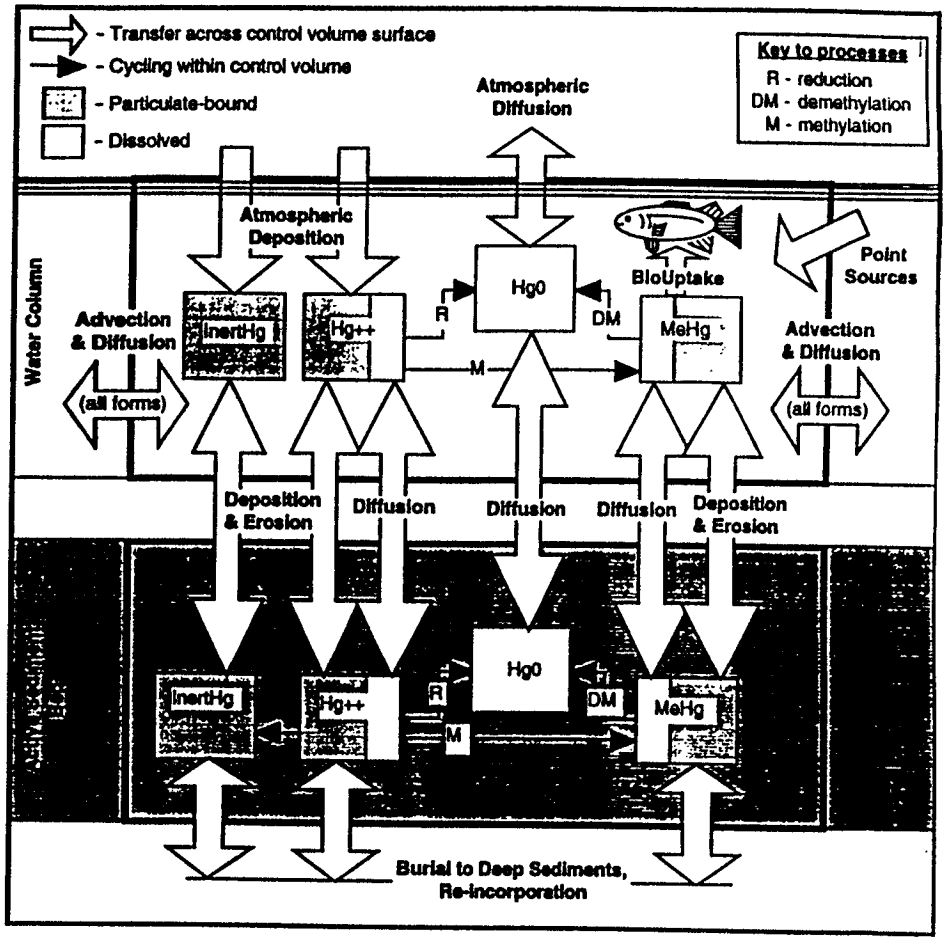
- What Forms of Hg in Cache Creek High Flows Lead to Bioaccumulation of Hg in Fish?

  Cinnabar, Metal, Sorbed on Particulate Surfaces Such as Fe Hydrous Oxides, Others?

  Only Certain Forms of Hg Are Available for Methylation in Aquatic Sediments

  Hydrous Metal Oxides May Be Key Form That Leads to Methyl Hg in Fish

Mercury Cycling in the Aquatic Environment



(By A. Bale, Larry Walker Associates, Davis, CA)